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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,440	03/01/2004	Tamito Suzuki	X2007.0152	9789

32172 7590 02/28/2005

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EXAMINER

BELLAMY, TAMIKO D

ART UNIT	PAPER NUMBER
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2856

DATE MAILED: 02/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/790,440	SUZUKI, TAMITO
Examiner	Tamiko D. Bellamy	Art Unit
		2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 3/1/04.

2a)  This action is FINAL. 2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-10 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) 7-10 is/are allowed.

6)  Claim(s) 1-6 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 01 March 2004 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/1/04 and 6/25/04.

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Ichikawa et al. (6,041,653).

Re to claim 1, as depicted in fig. 3, Ichikawa et al. discloses a plurality of capacitance detectors including pairs of moving electrodes (17) and fixed electrodes (18, 19) which are arranged to face each other so that facing areas there between are varied in response to acceleration. Ichikawa et al. discloses that the facing area formed between one pair of moving electrode (17) and the fixed electrode (18) differs from the facing area formed between the other pair of the moving electrode (17) and the fixed electrode (19) (Col. 4, lines 10-18).

Re to claim 2, as depicted in fig. 3, Ichikawa et al. discloses a plurality of moving electrodes (17) that are integrally formed together with the respect to the plurality of capacitance detectors (e.g., first capacitance detector (17, 18), and second capacitance 17,19).

Re to claim 3\1, Ichikawa et al. discloses a relatively small input acceleration is detected based on the acceleration signal produced by one capacitance detector in which

the facing area between the moving electrode and the fixed electrode is relatively small.

Ichikawa et al. discloses a relatively large input acceleration is detected based on the acceleration signal produced by other capacitance detector(s) in which the facing area between the moving electrode and the fixed electrode is relatively large. (Col. 4, lines 10-18) (Col. 4, lines 10-18).

Re to claim 4, as depicted in fig. 3, Ichikawa et al. discloses the capacitance detectors have a first and second moving electrodes (17), and first and second fixed electrodes (18, 19), which are arranged to face with each other with first and second areas facing areas there between in such a way that the first facing area formed between the first moving electrode (17) and the first fixed electrode (19) decreases, while the second facing area formed between the second moving electrode (17) and the second fixed electrode (18) increases (Col. 4, lines 10-18). Ichikawa et al. discloses the capacitance difference between capacitors (C1, C2) is converted in to a voltage signal. (Col. 4, lines 19-23).

Re to claim 5, as depicted in fig. 3, Ichikawa et al. discloses the first and second moving electrodes (17) are integrally formed together with the respect to the plurality of capacitance detectors.

Re to claim 6\4, Ichikawa et al. discloses a relatively small input acceleration is detected based on the acceleration signal produced by one capacitance detector in which the facing area between the moving electrode and the fixed electrode is relatively small. Sulzberger et al. discloses a relatively large input acceleration is detected based on the acceleration signal produced by other capacitance detector(s) in which the facing area

between the moving electrode and the fixed electrode is relatively large. (Col. 4, lines 10-18).

*Allowable Subject Matter*

2. Claims 7-10 are allowed.

Re to claim 7, the independent claim includes "a selector for selectively outputting the first acceleration as long as the first signal does not exceed a threshold level and for selectively outputting the second acceleration signal when the first acceleration exceeds the threshold level " in combination with the remaining claim limitation is not taught and/or made obvious by the prior art. Murata et al. discloses a detection circuit (200) that produces an output signal in response to capacitance variation between pluralities of capacitance detectors. Murata et al. does not teach a selector for selectively outputting the first acceleration as long as the first signal does not exceed a threshold level and for selectively outputting the second acceleration signal when the first acceleration exceeds the threshold level.

*Conclusion*

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamiko D. Bellamy whose telephone number is (571) 272-2190. The examiner can normally be reached on Monday - Friday 6:30 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2856

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tamiko Bellamy

T.B.

February 4, 2005



HEZRON WILLIAMS  
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